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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 2014*

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>08 May 2006</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-33</u> is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-33</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 8,

2006 has been entered.

Applicant's amendment amended claims 1-33. Currently Claims 1-33 are

pending.

Response to Amendment

2.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action.

Response to Arguments

3.   Applicant's arguments with respect to claims 1-33 have been considered but are

moot in view of the new ground(s) of rejection.

It is noted that the applicant did not challenge the Official Noticed facts cited in

the previous Office Action(s) therefore those statements as presented are herein after

prior art. Specifically it has been established that it was old and well known in the art at

the time of the invention to use a hash table to efficiently store and access large

amounts of data.

Claim Rejections - 35 USC § 101

4.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5.   Claims 1-8, 10-16 and 19-33 are rejected under 35 U.S.C. 101 because directed

towards non-statutory subject matter.

Regarding Claims 1-8, 10-16 and 19-33, for a claimed invention to be statutory,

the claimed invention must produce a useful, concrete, and tangible result.

In the present case, the claimed method/system merely collects and analyzes

data indicative of a temporal relationship between at least two persons/team members,

and therefore does not produce a useful, concrete, and tangible result.

A useful, concrete and tangible result, for example, might be achieved through

such features as the visual display of the temporal relationships between the at least

two persons, generating a report comprising a series of relationship metrics or the

results of the statistical analysis, or utilizing the determined temporal interpersonal

relationships to affect the management of a project.

Claim Rejections - 35 USC § 112

6.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7.   Claims 16-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 16-19 recite the limitation "*the* first and second project team members" which is not recited in claim 11. There is insufficient antecedent basis for this limitation in the claim.

Examiner interpreted the claims to read "*a* first and second project team members" for the purposes of examination.

Claim Objections

8.   Claim 28 is objected to because of the following informalities: Claim 28 contains a grammatical error "*their* statistical analysis" instead of the intended "*the* statistical analysis". Appropriate correction is required.

Claim Rejections - 35 USC § 103

9.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

10.   Claims 1-3, 7-13, 16-27 and 29-32 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Garton et al., Studying On-Line Social Networks (1999) in view of

Eloranta, et al., Improved project management through improved document

management (2001).

       Regarding Claims 1, 11, 20, 22 and 27 Barton et al. teach a system and method

for determining interdependencies (links, associations, relationships, etc.) between

persons (project team members, at least two project team members, first/second

persons) comprising:

       - receiving and storing data (parameters, values, etc.) indicative of a temporal

relationship (strands, relations, ties, etc.; "Relations", Pages 78-79) between at least two

persons (first/second project team members) resulting from their interaction, usage

and/or contribution of at least one (development project) artifact (email, fax, document,

deliverable, code, etc.; software logging "Collecting Data for CMC Studies", Pages 88-

89; "Collecting Data", Pages 90-91; Last Two Paragraphs, Page 92);

- statistically analyzing the temporal relationship (strands) data (network density,

positional analysis, range, centrality, roles, etc. "How Are Network Data Analyzed",

Pages 93-94);

- forming and storing at least one metric (value, number, characterization, etc.)

representative of the interdependency relationship (network density, positional analysis,

range, centrality, roles, social network map, etc.; Paragraphs 1-2, Page 83; Paragraph

3, page 84; Paragraph 3, Page 85);

- wherein the temporal relationship between the at least two persons

(first/second project team members) quantifies the interdependency relationship and

indicates a level of work (e.g. frequency of use, mean frequency of contact, frequency of

exchange) the persons are performing on the at least one (development) project artifact

(Last Two Paragraphs, Page 92; Last Paragraph, Page 93; Paragraph 2, Page 96;

Table 4.2; Figure 4.2); and

- wherein the method steps are performed over a computer network (local area

network, Internet, wide area network, Intranet, On-Line, etc.; Paragraph 2, Page 89).

Garton et al. does not expressly teach that the artifact is a development project

artifact, tracking *modifications* to at least one artifact or subsequently that the temporal

relationships/interdependencies between the at least two persons result from the

modifications to at least one artifact as claimed.

Eloranta et al., teach tracking modifications to at least one development project

artifact (document, code, deliverable, etc.) and forming temporal

relationships/interdependencies between at least two project team members (persons)

that result from their interactions, including artifact modifications ("The document flows

reveal who actually uses and produces information and naturally who are not doing

either activity", Column 1, Paragraph 1, Page 236; Column 1, Bullets 2-5, Page 238;

Column 2, Last Paragraph, Page 238; Figure 2), in an analogous art of determining

interdependencies between persons and artifacts for the purposes of

understanding/mapping artifact (information/document) flows and/or to understand the

organization/team/social network "behind the chart" (Column 1, Bullet 1, Page 237;

Column 2, Bullet 1, Page 237; Column 2, Paragraph 2, Page 237; Column 1, Paragraph

3, Page 239).

Eloranta et al. further teaches that at least one artifact is associated with a

development project (Column 1, Paragraph 1, Page 232) and includes at least one of a

data element and a data file (Section 3.1 Elementary Concepts of Documents and

Document Management, Page 236).

It would have been obvious to one skilled in the art at the time of the invention

that the system and method for determining interdependencies between persons as

taught by Garton et al. would have benefited from tracking modifications to at least one

development project artifact and forming temporal relationships/interdependencies

between the at least two persons resulting from the *modifications* to at least one

development project artifact in view of the teachings of Eloranta et al.; the resultant

system/method enabling users to understand/manage the flow of project artifacts

between persons (i.e. understand the "real" flows of documents in a development

project; Column 1, Bullet 1, Page 237; Column 2, Bullet 1, Page 237; Column 2,

Paragraph 2, Page 237; Column 1, Paragraph 3, Page 239).

Further while Garton et al. does not expressly teach that the first/second persons

are project team members or that the artifact is a development project artifact as

claimed these differences are only found in the non-functional descriptive material and

are not functionally involved in the steps recited nor do they alter the recited structural

elements. The recited method steps would be performed the same regardless of the

specific relationship/association between the two or more persons or the intended field

of use of the system (i.e. development project). Further, the structural elements remain

the same regardless of the specific relationship/association between the two or more

persons or the intended field of use of the system (i.e. development project). Thus, this

descriptive material will not distinguish the claimed invention from the prior art in terms

of patentability, see In re Gulack, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir.

1983); In re Lowry, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994); MPEP 2106.

Regarding Claims 2, 12 and 21 Garton et al. teach a method and system for

determining interdependencies between persons wherein the data indicative of artifact

usage/interaction includes time/timing information (log; Paragraphs 3-4, Page 92).

Garton et al. does not expressly teach tracking artifact modifications or

subsequently that the collected artifact modification data that includes a time-stamp as

claimed.

Eloranta et al. teach tracking artifact modifications and subsequently collecting

artifact modification data that includes time-stamp ("latest modification date", causes of

changes, metadata, history, etc.; Column 2, Page 236; Column 2, Last Paragraph, Page

238) in an analogous art of determining interdependencies between persons and

artifacts for the purposes of tracking modifications to development project artifacts and

their impact on the project/business (Column 1, Last Paragraph Page 238).

It would have been obvious to one skilled in the art at the time of the invention

that the system and method for determining interdependencies between persons as

taught by Garton et al. would have benefited from tracking artifact modifications by

collecting artifact modification data that includes a time-stamp in view of the teachings

of Eloranta et al.; the resultant system/method enabling users to track modifications to

development project artifacts and their impact on the project/business (Eloranta et al.:

Column 1, Last Paragraph Page 238).

Regarding Claims 3, 13 and 26 Garton et al. teach a method and system for

determining interdependencies between persons wherein the at least one artifact

includes at least one of a data element and a data file (Paragraph 2, Page 78; Last Two

Paragraphs, Page 92).

Regarding Claims 7 and 16 Garton et al. teach a method and system for

determining interdependencies between persons further comprising forming a series of

interdependency metrics (positional analysis, network density, mean complexity, range,

centrality, etc.; Page 83; Paragraph 3, Page 84; Paragraph 3, page 85; Last Paragraph,

Page 93).

Regarding Claim 8 Garton et al. teach a method and system for determining

interdependencies between persons wherein the forming a series of interdependency

metrics further comprises repeating at predetermined, random or pseudo-random time

periods the method steps of receiving, analyzing and storing (Last Paragraph, Page 93;

Paragraph 3, page 96; Last Paragraph, Page 95; Figures 4.2-4.5).

Regarding Claims 9 and 17-18 Garton et al. teach a method and system for

determining interdependencies between persons further comprising graphically

displaying the series of metrics (sociograms, commercial statistically analysis packages

– SAS, SPSS; Last Paragraph, Page 93; Paragraph 3, Page 96).

Regarding Claim 10 Garton et al. teach a method and system for determining

interdependcies between persons further comprising generating a human legible

alphanumeric description of at least one metric to describe the strength of the

interdependency relationship (strong, weak, isolate, etc.; Paragraph 2, Page 79;

Paragraph 3, Page 78; Paragraph 2, Page 96).

Regarding Claims 23-24 Garton et al. does not expressly teach storing artifact

modification data/parameters as claimed.

Eloranta et al. teach storing artifact modification data/parameters in a

database/document management system and method (Section 3 Documents and

document management, Pages 234, 236) in an analogous art of determining

interdependencies between persons and artifacts for the purposes of tracking

modifications to development project artifacts and their impact on the project/business

(Column 1, Last Paragraph Page 238).

It would have been obvious to one skilled in the art at the time of the invention

that the system and method for determining interdependency relationships between two

or more persons as taught by Garton et al. would have benefited from tracking and

storing artifact modification data/parameters in a database/table in view of the teachings

of Eloranta et al.; the resultant system/method enabling users to track modifications to

development project artifacts and their impact on the project/business (Eloranta et al.:

Column 1, Last Paragraph Page 238).

Neither Garton et al. nor Eloranta et al. teach storing artifact modification data in a hash table as claimed.

Official notice is taken that in computer science, a hash table is an associative array data structure that associates keys with values. The primary operation it supports efficiently is a lookup, where the hash table is given a key, an identifier for the information to be found such as a documents/artifact's ID, and asked to find the corresponding value. The hash table works by transforming the key using a hash function into a hash, a number that the hash table uses to locate the desired value.

Hash tables are often used to implement associative arrays, sets and caches. Like arrays, hash tables can provide constant-time $O(1)$ lookup on average, regardless of the number of items in the table. However, the rare worst-case lookup time can be as bad as $O(n)$. Compared to other associative array data structures, hash tables are most useful when a large number of records of data are to be stored.

It would have been obvious to one skilled in the art at the time of the invention that the system and method for determining interdependencies between at least two persons as taught by the combination of Garton et al. and Eloranta et al. would have benefited from utilizing a hash table to efficiently store and access the large amounts of data being collected in view of the teachings of official notice; the resultant system providing for consistent data access times despite large increases in the volume of data collected.

Regard Claim 25 Garton et al. does not expressly teach associating a key with each artifact as claimed.

Eloranta et al. teach managing the plurality of project artifacts using well known and widely available document management systems/databases which inherently associates at least one key (unique identifier, database key, code, number, unique file name, etc.) with each artifact/document (Section 3 Documents and document management, Pages 234, 236; Paragraphs 2-4, Page 238; Paragraphs 2-3, Page 241) in an analogous art of determining interdependencies between persons and artifacts for the purposes of tracking modifications to development project artifacts and their impact on the project/business (Column 1, Last Paragraph Page 238).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for determining interdependency relationships between two or more persons as taught by Garton et al. would have benefited from tracking and storing artifact modification data/parameters using well known document management systems/databases wherein the document management systems inherently associate at least one key with each artifact in view of the teachings of Eloranta et al.; the resultant system/method enabling users to track modifications to development project artifacts and their impact on the project/business (Eloranta et al.: Column 1, Last Paragraph Page 238).

Regarding Claim 29-32 Garton et al. teach a system and method for performing well known social/network analysis of two or more persons in order to determine/identify interdependency relationships (links, associations, interactions, etc.; Paragraphs 2-3, Page 76).

Garton et al. does not expressly teach tracking artifact modifications on individual artifacts or subsequently counting and/or summing the number of modifications made by the two or more persons or wherein the modifications are aggregate for artifacts of the same type as claimed.

Eloranta et al. teach tracking artifact modifications made by two or more persons wherein the artifact modification data includes change/revision history, causes of changes, document status and other metadata and analyzing the type, number and causes of changes to the various project artifacts (Column 2, Page 236; Bullets 2-4, Page 238; Column 2, Last Paragraph, Page 238; Column 1, Paragraphs 1-3, Page 239; Column 1, Paragraphs 2-3, Page 241; "The analysis of engineering changes was astonishing more that 12% of the drawings had been changed after the start of production.", Column 1, Paragraph 1, Page 239) in an analogous art of determining interdependencies between persons and artifacts for the purposes of tracking modifications to development project artifacts and their impact on the project/business

(Column 1, Last Paragraph Page 238) as well as improving the project team's

performance (Column 1, Paragraphs 1-3; Page 239).

It would have been obvious to one skilled in the art at the time of the invention

that the system and method for determining interdependency relationships between two

or more persons as taught by Garton et al. would have benefited from tracking and

storing artifact modification data/parameters using well known document management

systems/databases and analyzing (summing, counting, aggregating by type) the

collected modification data in view of the teachings of Eloranta et al.; the resultant

system/method enable project team's to track and analysis of modifications to

development project artifacts thereby enabling project team's to improve their

performance (Eloranta et al.: Column 1, Paragraphs 1-3; Page 239).

11.   Claims 4-6, 14-15 and 28 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Garton et al., Studying On-Line Social Networks (1999) in view of

Elonranta, et al., Improved project management through improved document

management (2001) as applied to claims 1-3, 7-13, 16-27 and 29-32 above and further

in view of Puittinen et al., Measuring and Visualizing information transfer in networked

collaboration (1999).

Regarding Claims 4 and 14 Garton et al. teach a method and system for

determining interdependencies between persons wherein the statistical analysis of

collected temporal relationship data includes the utilization of old and very well known

statistical analysis packages such as SAS and SPSS (Last Paragraph, Page 93).

Neither Garton et al. nor Eloranta et al. teach utilizing regression analysis to

determine interdependencies between at least two persons as claimed.

Puittinen et al. performing a regression analysis (i.e. determining the association

between a dependent variable and one or more independent variables; Page 88;

Section 3 The model, Pages 89-90) in an analogous art of determining

interdependencies between at least two persons (organizations, team, etc.) for the

purposes of enabling users to quantify and/or classify the strength of the

interdependency relations between two or more persons (Paragraph 3, Page 89; Table

I).

More generally Puittinen et al. teach a method and system for

determining/analyzing interdependencies (relationships, links, associations, etc.)

between project members working on a development project over a computer network

(Internet) comprising:

- receiving (collecting, acquiring, etc.) data/information indicative of a temporal

relationship between two or more project members having modified at least one project

artifact (document, code, etc.; Section 4.2 Log Management, Page 92; Paragraph 1,

Page 91; Figure 1, "Log Management Layer", Figure 2; Figure 5, "Log Files");

- statistically analyzing the data indicative of the temporal relationship between

the two project members (Section 3 The model, Pages 89-90; Paragraph 3, Page 95;

Table I; Equations 1-5);

- forming (determining, calculating, etc.) at least one metric (value, number, etc.)

representative of the relationship (interdependency, associate, link, distance,

correlation, interaction, etc.) between the two project members (e.g. document usage,

communication; Paragraph 3, Page 86; Section 4.4 Visualization, Pages 92-93; "Nodes

and links can have different colours and the links can be different widths. The (numeric)

attributes bound to nodes and links mapped onto graphic cues...", Paragraph 5, Page

93; "Link width is bound to the breadth of information exchange attribute. The more

documents two nodes have accessed, the wider the link between them is.", Paragraph

5, Page 93; Table I);

- storing (saving) at least one metric (value, number, etc.) representative of the

interdependency (interaction, link, communication, etc.) between two project members

(databases, files, memory, web pages, etc.; Paragraph 6, Page 87; "The data from the

above files are fed to the Java-applet, that draws the graph...", Paragraph 4, Page 93;

Figures 1, 4); and

 - wherein the steps of receiving the data, statistically (mathematically) analyzing

the data and forming at least one metric (indicator, value, measure, parameter, etc.) are

performed over a computer network (Internet; Page 93; System Architecture, Pages 90-

91; Figures 1-5).

Puittinen et al. further teaches that the system and method for determining

project team member interdependencies:

 - wherein the artifact data includes a time-stamp (Paragraph 5, Page 86; Section

4.2 Log Management, Page 92; Step 3, Page 88); and

 - wherein the artifact includes at least one data element (e.g. tile, description,

size, author, etc.) and a data file (document, document properties; Steps 2-5, Page 88;

Table II); and further comprises:

 - forming (determining, calculating, generating, etc.) and storing (saving) a series

of interdependency relationship metrics between the two project members (Page 88;

Section 3 The model, Pages 89-90; Tables I, II; Figures 1, 3, 5);

 - wherein the series of interdependency relationship metrics between the two

project members includes repeating at predetermined, random or pseudo-random time

periods (e.g. continuously; Section 3 The model, Pages 89-90; Section 4.2 Log

Management, Page 92);

 - displaying (graphically) the series of metrics (Section 4.4 Visualization, Pages

92-93; Figure 2; Table II);

 - generating a human legible alphanumeric description of the at least one

interdependency metric to describe the strength of the interdependency relationship

between the two project members (Section 5 Use the system, Pages 93-95; Table I);

and

 - associating a key with each artifact (e.g. artifact/document ID; Steps 1-5,

Pages 87-88; "indices", Section 4.2 Log Management, Page 92).

 Puittinen et al. further teach:

 - that the system/method "...defines a *set of metrics* which enable to visualize

the performance of the organization through its communication and behavior....a model

to visualize the true *communication network* of the organization...provide management

with a unique view on how the organization is performing and how its efficiency can be

improved." (Summary);

that "Traditional manual approaches to understand organizational behavior can be

complemented by *automatic and on-line* based control of the electronic communication.

Here we are entering into a new era of *management metrics*, which aims to evaluate the

performance of the creative process bound to the exchange of documents." (Paragraph

3, Page 86);

 - that "Other *statistics* about information accessed (Number of bytes accessed,

status code of the requested operation, etc." (Bullet 5, Page 88) are determined/formed;

- "The information exchange analysis tool is a collection of components that focus on different aspects of the information exchange process based on data obtained from an information system access log." (Last Paragraph, Page 95);

- the system answers the questions "WITH WHOM is information exchanged? and WHAT documents has this node accessed?...This enables the management to check that the right partners are in communication with each other and that the work seems to be advancing." (Table II); and

- "The *information exchange model* showed how discrete interaction events could be combined to form information exchange events that *relate* two information system users to one another....it can be argued that useful relations between information system users can be inferred from system access log data. The information exchange network is just one such abstraction that intended to show *how project partners could be related to one another* based on their document usage activity." (Section 6.2, Page 99).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for determining project team member interdependencies as taught by the combination of Garton et al. and Eloranta et al. would have benefited from utilizing any of a plurality of well known statistical analysis techniques including but not limited to regression analysis in view of the teachings of Puittinen et al.; the resultant system/method enabling users to quantify and/or classify the strength of the

interdependency relations between two or more persons (Paragraph 3, Page 89; Table I).

Regarding Claims 5 and 15 Garton et al. teach a method and system for determining interdependencies between persons wherein the statistical analysis of collected temporal relationship data includes the utilization of old and very well known statistical analysis packages such as SAS and SPSS (Last Paragraph, Page 93).

Neither Garton et al. nor Eloranta et al. teach performing a correlation to produce at least one correlation coefficient as claimed

Puittinen et al. teach performing a correlation to produce at least one correlation coefficient, as part statistically analyzing the artifact data (value; Page 88; Section 3 The model, Pages 89-90; Table 1) in an analogous art of determining interdependencies between at least two persons (organizations, team, etc.) for the purposes of enabling users to quantify and/or classify the strength of the interdependency relations between two or more persons (Paragraph 3, Page 89; Table I).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for determining project team member interdependencies as taught by the combination of Garton et al. and Eloranta et al. would have benefited from performing a correlation to produce at least one correlation coefficient, as part

statistically analyzing the artifact data in view of the teachings of Puittinen et al.; the resultant system/method enabling users to quantify and/or classify the strength of the interdependency relations between two or more persons (Paragraph 3, Page 89; Table I).

Regarding Claim 6 Garton et al. teach a method and system for determining interdependencies between persons wherein the statistical analysis of collected temporal relationship data includes the utilization of old and very well known statistical analysis packages such as SAS and SPSS (Last Paragraph, Page 93).

Neither Garton et al. nor Eloranta et al. teach that the at least one interdependency metric includes at least one of the following: a correlation coefficient, a slope or an intercept as claimed.

Puittinen et al. teach a system and method for determining interdependencies between project members wherein the interdependency relationship metric includes at least one of the following a correlation coefficient (Page 88; Section 3 The Model, Pages 89-90; Table I), slope and/or an intercept in an analogous art of determining interdependencies between project team members/organizations for the purposes of enabling users to quantify and/or classify the strength of the interdependency relations between two or more persons (Paragraph 3, Page 89; Table I).

It would have been obvious to one skilled in the art at the time of the invention

that the system and method for determining project team member interdependencies as

taught by the combination of Garton et al. and Eloranta et al. would have benefited from

determining at least one of the following a correlation coefficient, slope and/or an

intercept as part of the statistical analysis of the relationship data in view of the

teachings of Puittinen et al.; the resultant system/method enabling users to quantify

and/or classify the strength of the interdependency relations between two or more

persons (Paragraph 3, Page 89; Table I).

Regarding Claim 28 Garton et al. teach a method and system for determining

interdependencies between persons wherein the statistical analysis of collected

temporal relationship data includes the utilization of old and very well known statistical

analysis packages such as SAS and SPSS (Last Paragraph, Page 93).

Neither Garton et al. nor Eloranta et al. that the statistical analysis includes at

least one of a regression model and correlation as claimed.

Puittinen et al. teach that the system and method for determining

interdependencies between project members wherein statistically analyzing includes

performing a regression analysis and a correlation (Page 88; Section 3 The model,

Pages 89-90) in an analogous art of determining interdependencies between project

team members/organizations for the purposes enabling users to quantify and/or classify

the strength of the interdependency relations between two or more persons (Paragraph 3, Page 89; Table I).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for determining project team member interdependencies as taught by the combination of Garton et al. and Eloranta et al. would have benefited from determining at least one of a regression model and correlation as part of the statistical analysis of the collected relationship data in view of the teachings of Puittinen et al.; the resultant system/method enabling users to quantify and/or classify the strength of the interdependency relations between two or more persons (Paragraph 3, Page 89; Table I).

12.   Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et

al., Visualization Components for Persistent Conversations (2001).

        Regarding Claim 33 Smith et al. teach a computer-readable medium having

stored thereon sequences of instructions, the sequences of instructions, when executed

by a processor, causes the processor to (Abstract; Column 2, Paragraphs 2-3, Page

136; "we developed a set of visualization components that illustrate the structure of

individual message threads, the temporal activity of authors and the roles of authors

within threads", Column 2, Paragraph 3, Page 138):

        - receive data indicative of a temporal relationship between a first and second

persons resulting from modification of at least one artifact (document, discussion thread,

patterns of discussion, netscan data, usenet data/database, etc.; Usenet, Column 1,

Page 137; Piano Roll, Column 1, Page 141.);

        - statistically analyze the data indicative of the temporal relationship between the

first/second persons (conversation maps, interpersonal connections, activity pattern;

Column 1, Last Paragraph, Page 139; Column 2, Paragraph 1, Page 139; Figure 3,

Element C; Figure 6);

        - form at least one metric representative of an interdependency relationship

between the first/second persons (interpersonal connections, social accounting,

patterns of activity, conversational structure, etc.; Column 1, Last Two Paragraphs,

Page 138; Interpersonal Connections, Page 141);

- wherein the temporal relationship between the first/second persons is used to quantify the interdependency relationship (Interpersonal Connections, Page 141); and

- wherein the quantified interdependency relationship indicates a level of work (activity, contribution, effort, etc.) of the first/second persons are performing on the at least one artifact ("the thickness of the lines varies directly with how many replies each pair exchange", Column 2, Paragraph 1, Page 141; Figures 5-6).

Smith et al. further teaches aggregating a series of parameters/metrics (Column 1, Paragraph 3, Page 137) as well as graphically displaying a series of metrics (data, values, etc.) indicative of the temporal relationships between the first/second persons (netscan visualization dashboard; Figures 5-6).

Official notice is taken that utilizing Usenet/newsgroups for a plurality of user efforts including but not limited to development projects wherein these groups assist the team members in interacting/communicating regarding the team's efforts. For example it is not unusual for technical teams, school team or other "development" teams to utilize Usenet/newsgroup to discuss work, homework assignments, class projects or the like.

It would have been obvious for one skilled in the art at the time of the invention that the computer-readable medium for determining interdependency relations between at least two persons as taught by Smith et al. would have been utilized for any of a plurality of projects (team effort/work/collaboration) in view of the teachings of official notice; the resultant system/method assisting users in more effectively using

Usenet/newsgroup collaboration tools/systems by identifying patterns of collaboration (Smith et al.: Abstract).

Smith et al. does not expressly teach that the first/second persons are project team members or that the artifact is a development project artifact as claimed however, these differences are only found in the non-functional descriptive material and are not functionally involved in the steps recited nor do they alter the recited structural elements. The recited method steps would be performed the same regardless of the specific relationship/association between the two or more persons or the intended field of use of the system (i.e. development project). Further, the structural elements remain the same regardless of the specific relationship/association between the two or more persons or the intended field of use of the system (i.e. development project). Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see In re Gulack, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); In re Lowry, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994); MPEP 2106.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Raju et al., U.S. Patent No. 6,067,541, teach a system and method for tracking modifications to documents/artifacts.

- Altschuler et al., U.S. Patent No. 6,151,585, teach a system and method for determining interdependencies/relationships between at least two persons via the analysis of resource utilization data wherein the temporal relationships comprise at least one metric representative of the relationship.

- Jones et al., U.S. Patent No. 6,493,731, teach a system and method for tracking modifications to project artifacts including documents and further comprising determining interdependency relationships between the documents.

- Trevithick et al., U.S. Patent Publication No. 2002/0116466, teach a system and method for determining and characterizing interdependencies between at least two persons (social networks, etc.) by collecting, monitoring and analyzing a plurality of artifacts (e.g. electronic mail)

- Armstrong et al., U.S. Patent Publication No. 2002/0169737, teach a system and method for determining interdependencies between at least two persons based on their interaction, usage and/or contribution of artifacts (documents) as well as the system's integration with well-known groupware and document management systems/methods (Paragraphs 0101-0102) which "preferable have metrics which indicate the artifacts history (who viewed it, who downloaded it, who referenced it)."

- Benson, Peter Jackson, A Field Study of Communication Patterns in an

Organization Using NEGOPY Computerized Network Analysis Technique (1987)

teaches a system and method for determining the interdependencies between at least

two persons (communication network).

- Ackerman et al., Social Activity Indicators (1995) teach a system and method

for determining the level of work (social activity indicator) associated with one or more

development project artifacts.

- Managing Core Competencies of the Corporation – Organizational Network

Mapping (1996) teaches determining interdependency relationships between at least

two persons (organization map, knowledge network, collaboration patterns, etc.) based

on the collection and analysis of a plurality of data including but not limited to

document/information exchange data.

- Krebs, Valdis, Organization Network Analysis (2001) teaches a system and

method for identifying knowledge networks comprising interdependency relationships

between at least two persons wherein the system/method analyzes a plurality of data

including artifact/information/document exchanges.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Scott L. Jarrett whose telephone number is (571) 272-

7033. The examiner can normally be reached on Monday-Friday, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hafiz Tariq can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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